09/735,256

1. (Currently Amended) A system for predicting semiconductor product costs at a fabricator comprising:

a storage medium including a database of historical critical dimensions and historical critical groundrules correlated to cost functions at said fabricator;

a user interface having user inputs for new design parameters and new critical groundrules associated with a new device to be produced at said fabricator; and

a computer adapted to:

receive said user inputs[[,]] ;

~~extract data from said storage medium and compute semiconductor costs for said new device~~

perform a regression analysis on historical costs of historical critical dimensions at said fabricator, using said historical critical dimensions as independent variables and said historical costs as dependent variables;

create, in said database, models from said regression analysis showing a relationship between said historical critical dimensions and said historical costs;

input new design parameters and new critical dimensions of a new device into said database; and

predict product costs of said new device based on said models.

2. (Original) The system in claim 1, wherein said historical critical dimensions and said new critical dimensions comprise gate dimensions.

3. (Original) The system in claim 1, wherein said new critical dimensions are smaller than said historical critical dimensions.

4. (Currently Amended) The system in claim 1, wherein said new device comprises ~~a future~~ an unknown technology generation.

5. (Original) The system in claim 4, wherein fabrication hardware and fabrication methods for producing said future technology generation are unknown.

6. (Currently Amended) The system in claim 1, wherein said ~~relationships~~ models comprise base models and models that include options.

7. (Currently Amended) The system in claim 1, wherein said ~~relationships~~ models comprise models that illustrate that costs increase exponentially as said historical critical dimensions and said historical critical groundrules are reduced.

8. (Currently Amended) A method of predicting semiconductor product costs comprising:

performing a regression analysis on historical costs of historical critical dimensions at a fabricator, using said historical critical dimensions as independent variables and said historical costs as dependent variables;

creating, in a database, models from said regression analysis showing a relationship between said historical critical dimensions and said historical costs; ~~and~~

inputting new design parameters and new critical dimensions of a new device into said database; and

predicting product costs of said new device based on said models.

9. (Original) The method in claim 8, wherein said historical critical dimensions and said new critical dimensions comprise gate dimensions.

10. (Original) The method in claim 8, wherein said new critical dimensions are smaller than said historical critical dimensions.

11. (Currently Amended) The method in claim 8, wherein said new device comprises ~~a future~~ an unknown technology generation.

12. (Original) The method in claim 11, wherein fabrication hardware and fabrication methods for producing said future technology generation are unknown.

13. (Original) The method in claim 8, wherein said models include base models and models that include options.

14. (Original) The method in claim 8, wherein said models illustrate that costs increase exponentially as said historical critical dimensions and said historical groundrules are reduced.

15. (Original) A system for predicting semiconductor product costs at a fabricator comprising:

a regression analyzer adapted to determine relationships between historical critical dimensions of historical technologies and costs of said historical technologies;

a user interface for inputting a new critical dimension of a new technology; and

a calculator for predicting a cost of said new technology based on said new critical dimension and said relationships.

16. (Original) The system in claim 15, wherein said historical critical dimensions and said new critical dimensions comprise gate dimensions.

17. (Original) The system in claim 15, wherein said new critical dimensions are smaller than said historical critical dimensions.

18. (Original) The system in claim 15, further comprising a storage unit adapted to store a database of said relationships.

19. (Currently Amended) The system in claim 15, wherein said new device comprises a ~~future~~ an unknown technology generation.

20. (Original) The method in claim 19, wherein fabrication hardware and fabrication methods for producing said future technology generation are unknown.

21. (Currently Amended) A computer program product readable by a computer including a computer program for performing a method of predicting semiconductor product costs, said method comprising:

performing a regression analysis on historical costs of historical critical dimensions at a fabricator, using said historical critical dimensions as independent variables and said historical costs as dependent variables;

creating, in a database, models from said regression analysis showing a relationship between said historical critical dimensions and said historical costs; ~~and~~

inputting new design parameters and new critical dimensions of a new device into said database; and

predicting product costs of said new device based on said models.

22. (Original) The computer program product in claim 21, wherein said historical critical dimensions and said new critical dimensions comprise gate dimensions.

23. (Original) The computer program product in claim 21, wherein said new critical dimensions are smaller than said historical critical dimensions.

24. (Currently Amended) The computer program product in claim 21, wherein said new device comprises ~~a future~~ an unknown technology generation.

25. (Original) The computer program product in claim 24, wherein fabrication hardware and fabrication computer program products for producing said future technology generation are unknown.

26. (Original) The computer program product in claim 21, wherein said models include base models and models that include options.

27. (Currently Amended) The computer program product in claim 21, wherein said models illustrate that costs increase exponentially as said historical critical dimensions ~~and said historical groundrules~~ are reduced.